No. 08-694

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In The

Supreme Court of the United States

FEDERAL TRADE COMMISSION,

Petitioner,

v.

RAMBUS INCORPORATED,

Respondent.

On Petition For Writ Of Certiorari To The United States Court Of Appeals For The District Of Columbia Circuit

BRIEF *AMICUS CURIAE* OF THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION IN SUPPORT OF PETITIONER

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TABLE OF CONTENTS

Page

TABLE OF CONTENTS i

TABLE OF AUTHORITIES ii

INTEREST OF *AMICUS* 1

SUMMARY OF ARGUMENT 2

ARGUMENT 3

I. Consensus-Based Industry Standard-Setting Processes Serve a Crucial Role in the Information Technology Industry 3

A. Standards are critical to the design and operation of complex IT systems ... 4

B. Participants in SSOs must act in good faith to encourage others to participate, as well as implement or use the standards that result; broad participation is necessary to succeed 6

II. The Circuit Court's Opinion Undermines Consensus-Based Standard-Setting 7

III. The Circuit Court Underestimates the Effect of a Patent that Captures a Standard, and Conflates Competition Among Standards with Marketplace Competition .. 9

IV. The Circuit Court Misunderstands the Purposes that RAND Licensing Serve for Industry Members 13

CONCLUSION 15

TABLE OF AUTHORITIES

Page

CASES

eBay Inc. v. MercExchange LLC, 547 U.S. 388 (2005) 10

Rambus Inc. v. F.T.C., 522 F.3d 456 (D.C. Cir. 2008) 4, 7, 11

STATUTES

National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, 110 Stat. 775, § 12(d) (1996) 5

OTHER MATERIALS

Jonathan Band & Masanobu Katoh, *Interfaces on Trial* (1995) 3

Martin Fackler, *Toshiba Concedes Defeat in the DVD Battle*, N.Y. Times, Feb. 20, 2008 6

Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. Econ. Persp. 93 (1994) 12

Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (2003) 8

Federal Trade Comm'n & Dept. of Justice Hearings on Competition and Intellectual Property Law and Policy in the Knowledge Based Economy (Feb. 28, 2002) (statement of Frederick J. Telecky) 13

TABLE OF AUTHORITIES – Continued

Page

Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, Office of Mgmt. & Budget Circular A-119, 63 Fed. Reg. 8,546 (Feb. 19, 1998).....3, 5

Sean P. Gates, *Standards, Innovation, and Antitrust: Integrating Innovation Concerns into the Analysis of Collaborative Standard Setting*, 47 Emory L.J. 583 (1998).....12

Carl Shapiro & Hal Varian, *Information Rules: A Strategic Guide to the Networked Economy* (1999).....8

U.S. Cong. Office of Tech. Assessment, *Electronic Enterprises: Looking to the Future* (1994).....4

U.S. Cong. Office of Tech. Assessment, *Global Standards: Building Blocks for the Future* (1992).....3, 5

U.S. Dept. of Justice & Fed. Trade Comm'n, *Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition* (2007).....8, 10, 14

World Wide Web Consortium ("W3C"), *W3C Patent Policy*, (Feb. 5, 2004).....14

BRIEF *AMICUS CURIAE* OF THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION IN SUPPORT OF PETITIONERS

The Computer & Communications Industry Association (CCIA) submits this brief as *amicus curiae* and respectfully requests that the petition for a writ of certiorari be granted.

INTEREST OF *AMICUS*[1]

The Computer & Communications Industry Association is a non-profit trade association dedicated to "open markets, open systems, and open networks." CCIA members participate in many sectors of the computer, information technology, and telecommunications industries and range in size from small entrepreneurial firms to the largest in the industry. CCIA members use the patent system regularly, and depend upon it to fulfill its constitutional purpose of promoting innovation.

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[1] Pursuant to S. Ct. R. 37, *amicus curiae* CCIA affirms that no monetary contributions were made for the preparation or submission of this brief, and that no part of this brief was drafted by any parties in this action. Counsel of record for all parties were notified more than 10 days prior to filing and have consented to the filing of this brief. Petitioner and Respondent have consented to the filing of this brief. The Petitioner's letter of consent is being filed herewith; the Respondent's letter of blanket consent was filed in the docket on December 8.

CCIA supports the petition for certiorari. This brief focuses on the important purpose of the standard-setting process in modern information technology industries, which is insufficiently appreciated by the circuit court's decision.

SUMMARY OF ARGUMENT

This brief argues that consensus-based industry standard-setting is crucial to the information technology industry. Successful standards promote interoperability among complex IT products. Interoperability reduces transaction costs and market prices by enabling interconnection among competing, compatible products that adhere to the same standards, which serves to facilitate modularity, innovation, and competition. To achieve these goals, participants in standard-setting organizations (SSOs) must act in good faith to encourage broad participation in the process and implementation of the results.

The circuit court's opinion absolves conduct in violation of these norms. Because the circuit court's opinion undermines consensus-based standard-setting, misunderstands the market implications when standards are captured by patents, and conflates competition among standards with marketplace competition, the Court should grant the petition.

ARGUMENT

I. Consensus-Based Industry Standard-Setting Processes Serve a Crucial Role in the Information Technology Industry.

Standards play a central role in both the architecture and process of innovation in IT. In the context of information technology products, standards are a common framework or interface, "an agreed upon set of specifications that define a particular product or that allow products to interoperate."[2] A standard may either be *de jure*, where a given specification is officially established by a standard-setting organization or consortium, or it may be a *de facto* standard, established by the marketplace. *See* Jonathan Band & Masanobu Katoh, *Interfaces on Trial* 41-43 (1995). This case concerns the former. Within products, standards enable different components to interoperate predictably and allow specialization by upstream suppliers that increases market efficiency and opportunities for innovation. Interoperability among products can reduce or eliminate transaction costs, and increases the value of marketed products and components by enabling interconnection and competition

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[2] U.S. Cong. Office of Tech. Assessment (OTA), *Global Standards: Building Blocks for the Future* 5 (1992). *See also Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, Office of Mgmt. & Budget Circular A-119, 63 Fed. Reg. 8,546 (Feb. 19, 1998) (hereinafter "OMB Circular A-119") (defining "technical standard" and differentiating from performance and professional standards).

among multiple providers.[3] Interoperability also facilitates modularity and innovation, since new products can be introduced on one side of the interface without changing what is on the other side.

The circuit court's reasoning wrongly implies that the goals of the industry-consensus standard-setting process will be advanced by competition among and between standards.[4] It leaves patent applicants and holders free to manipulate the system, even if the patented technology lacks intrinsic value, simply because a patent has been inadvertently incorporated into costly product development, manufacturing, and marketing. Because such opportunism threatens the competitive process throughout the IT sector, the circuit court's conclusion that Section 2 of the Sherman Antitrust Act does not apply merits review by this Court.

A. Standards are critical to the design and operation of complex IT systems.

Standards are critical to digital technology. Because they define how components work in complex products, systems, and ecosystems, standards facilitate interoperability within and among components and systems. Competing, interoperable implementations of a standard provide benefits for consumers

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[3] *Id. See also* U.S. Cong. Office of Tech. Assessment, *Electronic Enterprises: Looking to the Future* 61 (1994).

[4] *Rambus Inc. v. F.T.C.*, 522 F.3d 456, 466 (D.C. Cir. 2008).

and industry. By enabling interoperability, standards allow users to choose among competing brands confident that they can build on past investments and continue to do so in the future. The ability to choose between competing brands increases competition, thereby lowering prices, and prevents firms from extracting rents from customers who are "locked in" to legacy systems. Interoperability also benefits industry by ensuring that no one firm can lock in consumers and lock out competitors.

The U.S. government depends heavily on the continued success of technical standards. *See* OTA, *Global Standards*, *supra* note 2, at 9. In its capacity as a consumer of technology products, the federal government has promoted standards to encourage competition. For example, pursuant to the National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, 110 Stat. 775, § 12(d) (1996), Congress discouraged the use of government-unique standards in lieu of voluntary consensus standards in order to ensure competitive pricing in products procured. *See* OMB Circular A-119, 63 Fed. Reg. 8,546.[5]

Industry-consensus standards encourage the competition, modularity, and specialization needed to

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[5] OMB Circular A-119, as revised in 1998, states that its encouragement of the use of voluntary consensus standards is intended to, *inter alia*, eliminate cost, encourage the establishment of standards that serve national need, and encourage growth, efficiency, and competition i. U.S. enterprise. 63 Fed. Reg. 8,546.

promote distributed innovation in the global economy. Their adoption – particularly the adoption of open standards – remains central to U.S. competition policy. Opportunistic, deceptive behavior that undermines the legitimacy of consensus standards and the standard-setting process can only be viewed as hostile to the competitive process, and thus to consumer welfare.

B. Participants in SSOs must act in good faith to encourage others to participate, as well as implement or use the standards that result; broad participation is necessary to succeed.

Today's SSOs (including JEDEC in the present case) are collaborative enterprises that depend on trust, transparency, and good faith. Standards participants invest in industry-wide standard-setting efforts because they are all too aware of the possible damage to new markets that can be done by competing alliances, such as the standards war between VHS and Betamax, and more recently the competition over high-definition DVDs between Blu-Ray and HD-DVD.[6]

Standards adoption is not merely an engineering decision, however. Standards development is a complex and delicate process involving a mix of

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[6] *See* Martin Fackler, *Toshiba Concedes Defeat in the DVD Battle*, N.Y. Times, Feb. 20, 2008.

engineering, business, and legal concerns, each of which can be weighed against others. In light of this complexity, participants in standard-setting organizations must assess in advance the trade-offs among timeliness, technical quality, cost, the presence of patents, and terms under which patent rights are available, so as to make an informed choice that reflects their own business priorities. For this to work, they must be confident that other participants are not engaged in deception or manipulation of the process.

II. The Circuit Court's Opinion Undermines Consensus-Based Standard-Setting.

The circuit court's opinion misconceives the nature, scope, and significance of consensus-based standard-setting processes in the development of information technology. As a result, the ruling encourages a world of proliferating, incompatible standards held hostage by assorted patent holders. The circuit court concludes that the only injury resulting from Rambus's lack of good faith was that "JEDEC lost only an opportunity to secure a RAND commitment from Rambus." 522 F.3d at 467. This statement misapprehends the actual consequences. The lack of commitment leaves Rambus free to charge whatever it can extract from companies one-on-one – and to thereby capture much of the value of each company's investments in products incorporating the standard, as well as the high costs of switching technology to avoid continued infringement.

Under the court's ruling, industry-consensus standards become attractive targets for opportunists who manipulate the *ex parte* secrecy of the patent system and delay revealing their patents until the standards are widely implemented in marketed products. Facing an opaque and uncertain market and fearful of discriminatory licensing, companies may withdraw from standardizing efforts, or simply withdraw from the relevant market. Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* 43 (2003).

Facing these risks, standard-setting activities will likely move to closed, exclusive alliances. This "privatization" undermines the benefits of consensus standards, and also raises the risk of competing, incompatible alternatives, leading to destructive standards wars.[7]

Thus, JEDEC lost far more than Rambus's RAND commitment. JEDEC and all open, consensus-driven SSOs witnessed the erosion of trust in a collaborative process that is "widely acknowledged to be an engine driving the modern economy."[8] U.S.

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[7] *See generally* Carl Shapiro & Hal Varian, *Information Rules: A Strategic Guide to the Networked Economy* 261-70 (1999) (describing various types of standards wars).

[8] The circuit court's decision moves contrary to the recent recognition by both industry and competition agencies that greater transparency is needed in the standard-setting process. In fact, there is growing conviction that RAND itself is an

(Continued on following page)

Dept. of Justice & Fed. Trade Comm'n, *Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition* 33 (2007) (hereinafter "DOJ & FTC, *Antitrust Enforcement*"). Instead of focusing on this, however, the circuit court's opinion misdirects its attention to JEDEC's failure to anticipate precisely the scope, contours, and creative audacity of Rambus's deception, and the resulting effect on licensing.

III. The Circuit Court Misunderstands the Effect of a Patent that Captures a Standard, and Conflates Competition Among Standards with Marketplace Competition.

The circuit court misunderstands the effect that Rambus's intellectual property has on the standard at issue. Rambus induced JEDEC participants not only to adopt the infringing standard, but also to implement it as part of enormous investments in the design, mastering, production, and marketing of computer memory. Once this commitment was made, it was impossible for memory manufacturers to take back their investments. "[*E*]*x post*, the owner of a patented technology necessary to implement the standard may have the power to extract higher

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inadequate standard because licenses are negotiated in private and proving nondiscrimination is difficult and costly. By undercutting mechanisms for achieving even RAND commitments, the circuit court's decision exacerbates a preexisting threat to competition in the technology industry.

royalties or other licensing terms that reflect the absence of competitive alternatives." DOJ & FTC, *Antitrust Enforcement* at 36, 38. As was evident when *eBay v. MercExchange* was before this Court, patent holders can capture the value of investments that others have made and extract rents disproportionate to the value of the particular patent.[9] In that circumstance, denying an injunction in lieu of calculating a reasonable royalty serves the public interest in access to complex products at realistic prices without eviscerating the patent holder's rights.

Under a rule allowing Rambus to charge whatever it can impose, however, rational memory manufacturers can be forced to pay royalty fees up to the costs of switching to an alternative technology. Such incentives for non-disclosure and hold-up should not be added to the basic exclusionary rights of patent holders; the patent system is intended to *promote* public disclosure. Firms should not be permitted, let alone encouraged, to abuse the patent system by restricting disclosure in standard-setting in order to capture additional returns.

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[9] *eBay Inc. v. MercExchange LLC*, 547 U.S. 388, 396 (2005) ("When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations . . . an injunction may not serve the public interest.") (Kennedy, J., concurring).

The circuit court overlooks this problem by assuming that alternative technologies would rush in to counter Rambus's high prices:

> Indeed, had JEDEC limited Rambus to reasonable royalties and required it to provide licenses on a nondiscriminatory basis, we would expect less competition from alternative technologies, not more; high prices and constrained output tend to attract competitors, not to repel them.

522 F.3d at 466.

The circuit court appears to assume that there is a vigorous, real-time market for standards in which alternative technologies are poised to compete. In fact, huge investments have already been made in developing the standard, designing into products, and manufacturing and marketing those products. Alternatives are not standing by to compete in an upstream market for standards-compliant DRAM that has already been captured by Rambus. While standards occasionally compete with each other early in the process, companies tend to favor one or the other, or urge consolidation, to avoid the costs and uncertainty created by multiple incompatible standards. Competing standards in systems markets like IT are counter-productive unless the costs imposed by non-interoperability are exceeded by benefits arising from

variety.[10] Competition among incompatible standards not only fragments the market into submarkets,[11] but also imposes risks on implementers and end users, and may undermine confidence in the market and discourage investment in technologies based on any given standard.

The circuit court's decision conflates standards with products, but consumers do not consume standards. Instead, consensus standards serve to promote competing proprietary implementations of the *same* standards. Through standard-setting, participants cooperate in order to compete.[12] Competition among incompatible standards can lead to a technological tower of Babel where many products speak many languages and none understand one another. Where

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[10] In markets characterized by complex, interdependent products, the costs of incompatibility tend to swamp benefits from variety. Thus, such markets ultimately tend to "tip" toward *de facto* standardization in any event. In the absence of *de jure* standards, however, consumers of orphaned technology are saddled with the costs of their stranded investment, for example, a Betamax videocassette player. *See* Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. Econ. Persp. 93, 105-06, 109 (1994).

[11] As incompatible products are not as substitutable for one another, there is less interchangeability. This impairs cross-elasticity of demand, resulting in less price discipline in fragmented markets.

[12] Hence the term "co-opetition" which became widely used in the IT sector during the 1990s. *See, e.g.*, Sean P. Gates, *Standards, Innovation, and Antitrust: Integrating Innovation Concerns into the Analysis of Collaborative Standard Setting*, 47 Emory L.J. 583, 597 (1998).

incompatible standards proliferate, there is less interoperability, and less competition. In practice, the real competition takes place *above* the standard, through competing implementations, and *within* the standard as a market for ideas within the parameters that participants choose to establish.

IV. The Circuit Court Misunderstands the Purposes that RAND Licensing Serve for Industry Members.

At the same time, the court below fails to acknowledge the benefits of RAND licensing in the standards environment, including the benefits to patent holders whose patents are licensed. RAND commitments are the accepted norm in standard-setting today. They protect all participants against hold-up while enabling patent holders to avoid the high costs of researching their patent portfolios to determine what patents might conceivably read on the standard.[13] It makes no sense to set standards with no limits on what patent holders may charge after the fact. Even if the participants choose to abandon the standard before it is set, there will be

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[13] *See, e.g., Federal Trade Comm'n & Dept. of Justice Hearings on Competition and Intellectual Property Law and Policy in the Knowledge Based Economy* (Feb. 28, 2002) ("TI has something like 8,000 patents . . . and for us to know what's in that portfolio, we think, is just a mind-boggling, budget-busting exercise") (statement of Frederick J. Telecky).

substantial costs for all, attributable not only to wasted effort but to delay and foregone opportunities.

The circuit court's opinion misses the benefits accruing to those that contribute technology to standards. A RAND licensor benefits from the potential for much wider demand for its technology, albeit at a lesser price. RAND licensing typically only permits what is essential to practicing the standard, which may leave the patent holder in control of much of the surrounding terrain. The patent holder may also have patent claims on variations or complementary technologies that put it in a superior strategic position. In this respect, patent holders can even benefit from licensing royalty-free, a common practice for certain software- and Internet-related standards.[14] Royalty-free licensing normally means quicker and broader uptake of the standard than if royalties must be paid, *ceteris paribus*. Thus, while forfeiting short-term royalties, the patentee can increase the likelihood of adoption of a technology on which it has moved along a learning curve in advance of others and for which it may have complementary technologies that it is uniquely positioned to exploit.

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[14] World Wide Web Consortium ("W3C"), *W3C Patent Policy*, (Feb. 5, 2004); *see also* DOJ & FTC, *Antitrust Enforcement*, at 46 & n.71 (2007).

CONCLUSION

For the foregoing reasons, CCIA respectfully requests the Court to grant the petition.

Respectfully submitted,

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